

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A Coating composition for electrical conductors comprising consisting of

- A) 1 wt.% to 90 wt.%, based on the total weight of the binder, of one or more binders,
- B) 0.3 wt.% to 25 wt.%, based on the total weight of the binder, of one or more reactive particles based on an element-oxygen bound network with elements selected from the group consisting of silicon, zinc, aluminum, tin, boron, germanium, gallium, lead, the transition metals, the lanthanides and actinides, and
- C) 0 wt.% to 95 wt.%, based on the total weight of the binder, of one or more conventional additives solvents, pigments and/or fillers,

wherein the total of A) + B) + C) equal 100% and

wherein the reactive particles of component B are based on the element-oxygen network, on the surface of which reactive functions R_1 and optionally, non-reactive and/or partially reactive functions R_2 and R_3 being are bound by way of the oxygen of the network,

R_1 being contained in the particles in an amount up to 98 wt. %, based on the weight of the particles, and R_2 and R_3 being contained in the particles in an amount from 0 wt.% to 97 wt.% based on the weight of the particles;

wherein R_1 comprises ~~represents~~ radicals selected from ~~of the~~ metal acid esters; NCO ; urethane, epoxide, epoxy, carboxylic acid anhydride, $\text{C}=\text{C}$ double bond systems, OH, alcohols bound by way of oxygen, esters, ethers, chelating agents, COOH , NH_2 , NHR_4 , ~~and/or~~ reactive resin components and mixtures thereof;

wherein R₂ comprises ~~represents~~ radicals selected from of aromatic compounds, aliphatic compounds, fatty acid derivative₁, esters₁, ~~and/or~~ ethers, and mixtures thereof;

wherein R₃ represents comprises resin radicals₁;

wherein R₄ represents comprises radicals selected from of acrylate, phenol, melamine, polyurethane, polyester, polyester imide, polysulfide, epoxide, polyamide, polyvinyl formal resins₁, aromatic compounds, aliphatic compounds₁, esters₁, ethers, alcoholates, fats, ~~or~~ and chelating agents;

wherein said coating composition is applied to a substrate and cured; and

whereby laser irradiation is used to remove said coating composition from the substrate.

Claim 2. (original) The coating composition according to claim 1, containing 2 to 5 wt.% based on the total weight of the binder, of one or more reactive particles of component B.

Claim 3. (currently amended) The coating composition according to claim 1, wherein the radical R₁ is selected from the group consisting of OTi(OR₄)₃, OZr(OR₄)₃, acetyl acetonate, 2-hydroxyethanolate, and diethylene glycolate.

Claim 4. (original) The coating composition according to claim 1 wherein R₃ is selected from the group consisting of radicals of polyester imides, THEIC polyester imides and mixtures thereof.

Claim 5. (original) The coating composition according to claim 1 wherein R₄ is selected from the group consisting of radicals of acrylate resins, aminotriethanolate, acetyl acetonate, polyurethane resins, butyl diglycolate and any mixtures thereof.

Claim 6. (currently amended) The coating composition according to claim 1 wherein the reactive particles of component B contain[s] a network of

elements bound by oxygen selected from the group consisting of titanium, aluminium, silicon, zirconium and any mixtures thereof.

Claim 7. (original) The coating composition according to claim 6 wherein the reactive particles of component B have an average radius from 2 nm to 150 nm.

Claim 8. (original) The coating composition according to claims 1 to 7, wherein the compositions contain up to 7 wt.%, based on the total weight of the binder, of additional monomeric and/or polymeric element-organic compounds selected from the group consisting of orthotitanic acid ester, orthozirconic acid ester, titanium tetralactate, hafnium tetrabutoxide, tetraethyl silicate, silicone resins and any mixtures thereof.

Claim 9. (original) A process for coating a metal conductor which comprises applying the coating composition of claim 1 to a metal conductor and curing the composition.

Claim 10. (original) The process according to claim 9, wherein an electrically conductive wire is used as the metal conductor.

Claim 11. (original) The process according to claim 9 wherein the metal conductor is a pre-coated electrical conductor.

Ad Claim 12. (original) A process for coating a metal conductor which comprises applying the coating composition of claim 1 to a metal conductor and curing the composition; wherein the coating composition is applied as a single layer, as a base coat, as a middle coat and/or as a top coat to the metal conductor.

Claim 13. (original) A metal conductor coated with the cured coating composition of claim 1.

Claim 14. (currently canceled).
